

EU heating and cooling policy & EHPA priorities 2021



The European Heat Pump Association aisbl / founded 2000



143

Members

Heat pump manufacturers
Component manufacturers
National associations
Consultants
Research & test institutes

22

countries represented

International cooperation

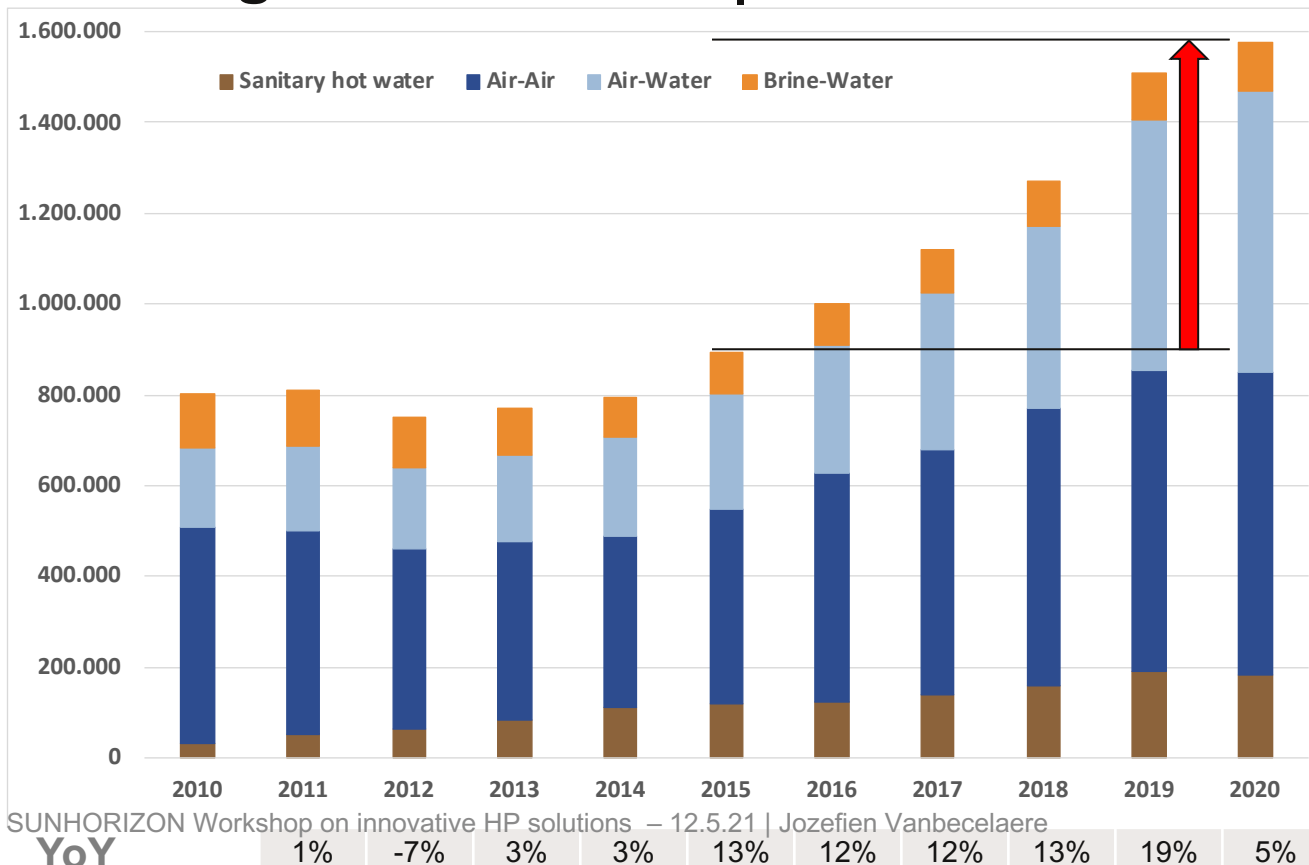
CECA, IEA, IEA HPC, IRENA, HPCJ

Vision

In a fully decarbonised Europe, **heat-pump technologies are the number one heating and cooling solution**, being a core enabler for a renewable, sustainable and smart energy system.

«strong market foundation»

market growth '05 – '20 | HP stock²⁰²⁰: 14.8 mill. installed



**EU-28 building
stock: 115-120
mill. buildings**

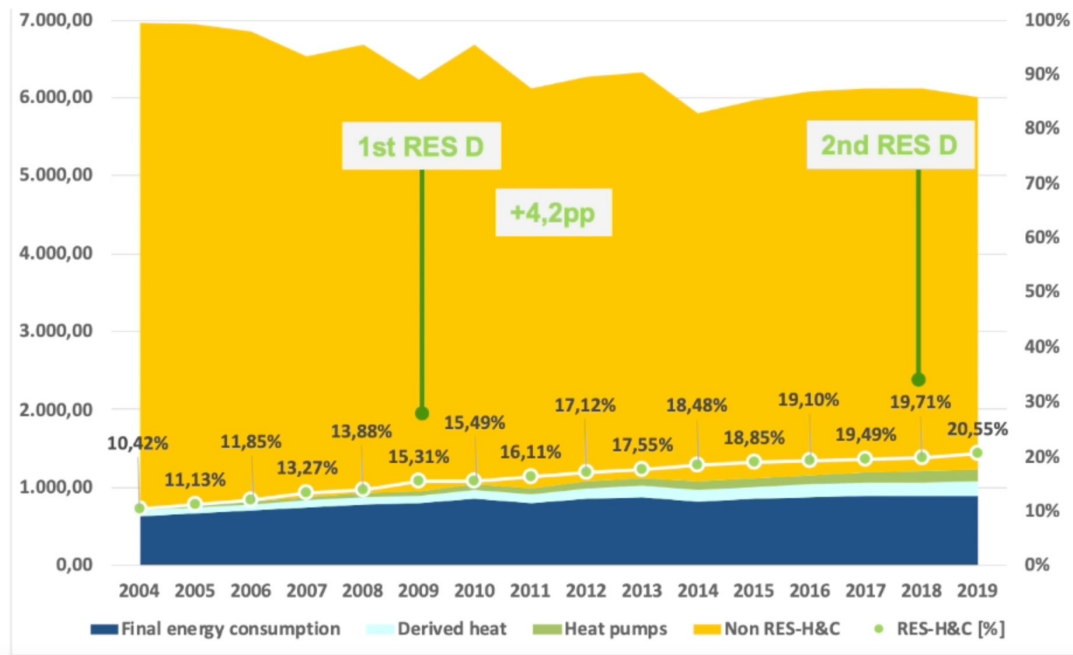
«a solid recognition in legislation» + ambitious targets

Legislation covering Heat Pumps

Clean energy 4 all Europeans package	Energy efficiency directive	Energy efficiency on systems level (+calculations for HP)	+	+
		Comprehensive assessments on heating and cooling	+	+
	Energy performance of buildings directive	New builds, renovation strategy + modernisation of H&C	+	+
		Smart buildings	+	
	Renewable energy directive	Definitions: renewable energy / renewable cooling	+	
		Sectorial target for renewable heating / cooling	+	+
	Governance Regulation	National energy and climate plans (NECP)	+	
		Improved data situation	+	
	Electricity market design	Flexible tariffs, smart grids	+	+
	F-gas regulation	Reduction of F-Gas related emissions	+	-
	Ecodesign regulations	Requirements on boilers, combi-boilers, air conditioners and smart appliances	+	-

RES in heating and cooling (based on Eurostat Shares)

<http://ec.europa.eu/eurostat/de/web/energy/data/shares>



< 1pp
annual increase of
renewable share

EU Green Deal & Climate Law



“I want Europe to become the first climate neutral continent in the world by 2050. To make this happen, we must take bold steps together A two-step approach is needed to **reduce CO₂ emissions by 2030 by 50, if not 55%.”**
President Ursula von der Leyen

CO₂
-55
%

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		Improved data situation	+	
	Electricity market design	Flexible tariffs, smart grids	+	+
	F-gas regulation	Reduction of F-Gas related emissions	+	-
European Green Deal And Climate law	Ecodesign regulations	Requirements on boilers, combi-boilers, air conditioners and smart appliances	+	-
		Transition towards a zero-CO ₂ emission society	+	
		More ambitious CO ₂ – emission target	+	
		Price for CO ₂ -emission	+	
		Extension of ETS to heating sector	+	+
		Renovation wave		
		Energy System integration		
	Long term strategy	fossil molecules → green molecules (H ₂ /CH ₄) or biomass	-	-
	National legislation	F-gas, taxation, certification requirements, standards	+	-

If not successful



EU Energy systems integration strategy

10 – 15 mio office & commercial buildings

65 %

7-10 mio heat pumps

90 mio residential <u>single</u> family units	15 mio residential <u>multi</u> family units
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40 %

42 mio heat pumps

today's HP stock

x 4

+ industry approx. 200 TWh = 0,1 mio

Renovation wave:

- Decarbonisation of heating and cooling
- Double the renovation rate
- Foster deep energy renovation: schools, public buildings
- **Renovate the 35 million least performing buildings by 2030**
- Allow for affordable and sustainable design via New European Bauhaus



Recognition: Heat pump technologies are essential to achieve Europe's energy and climate targets

**EU strategy on
energy systems integration**

+

**EU communication on the
renovation wave**

+

**Climate law and 55% CO2
emission reduction**

**48 – 60 million heat pumps by
2030**

**Renovation of 35 million least
performing buildings**

Fit for 55 package

- EED
- RED II
- EPBD



«activate end user demand»

- Make the 'best' technology also the most affordable

Taxation of electricity: need for level playing field

Electricity to fossil gas price ratio in 2020 (residential sector)



The way forward

**Adjustment of production
possible (+15%pa)**

+

Increase in demand

=

A decarbonised buildings stock

Industry is ready

**Electricity taxation
Lack of CO₂ price signal
Fossil fuel subsidies**

**An industrialisation
opportunity**

«4x as many heat pumps ... »

**Industry can deliver,
but**

**«We need framework conditions, that trigger
end-user demand»**

Heat pumps in the fit for 55 package



01

Align Policies on efficient AND renewable heating and cooling

- A comprehensive and ambitious heating decarbonisation roadmap
- Incentivize technologies that are simultaneously efficient and renewable
- Incentivize fuel switching in the EED



02

Unlock the full potential of heat pump technologies

- Ambitious and binding target for renewables in heating and cooling
- Enlarge the concept of waste heat to circular energy
- Address energy savings from industrial heat pumps, thermal storage and flexibility



03

Guide citizens to efficient and renewable heating and cooling solutions for their buildings

- One stop-shops for heating and cooling renovations
- Increased requirements on renewable and efficient heating in buildings
- More attractive training and certification for heat pump installers



04

Review energy pricing to guide end-users towards the most energy-efficient solutions

- Re-balance taxation of different energy carriers
- Internalise external effects of fossil energy use through carbon pricing
- Implement legislation to valorise flexibility